

# AFCTN Test Report 93-058

# **AFCTB-ID 92-064**







**Technical Publication Transfer** 

Using:

ArborText's Data

MIL-D-28000A (IGES) MIL-M-28001A (SGML) MIL-R-28002A (Raster) MIL-D-28003 (CGM)

**Quick Short Test Report** 

14 October 1992

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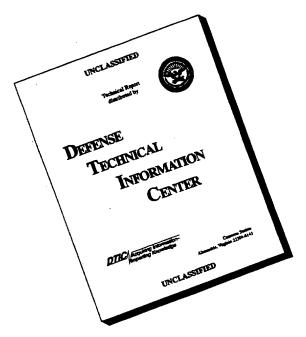
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Technical Publication Transfer
Using:
ArborText's Data

MIL-D-28000A (IGES)
MIL-M-28001A (SGML)
MIL-R-28002A (Raster)
MIL-D-28003 (CGM)

Quick Short Test Report

14 October 1992

**Prepared By** 

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#### 1. Introduction

## 1.1 Background

The Department of Defense (DoD) Air Force Continuous Acquisition and Life-Cycle Support (CALS) Test Newtwork (AFCTN) is conducting tests of the military standard for the Automated Interchange of Technical Information, MIL-STD-1840A, and its companion suite of military specifications. The AFCTN is a DoD sponsored confederation of voluntary participants from industry and government managed by the Electronic Systems Center (ESC).

The primary objective of the AFCTN is to evaluate the effectiveness of the CALS standards for technical data interchange and to demonstrate the technical capabilities and operational suitability of those standards. Two general categories of tests are performed to evaluate the standards; formal and informal.

Formal tests are large and comprehensive, which follow a written test plan, require specific authorization from the DoD, and may take months to prepare, execute, and report.

Informal tests are quick and short, used by the AFCTN technical staff, to broaden the testing base. They include representative samples of the many systems and applications used by AFCTN participants. They also allow the AFCTN staff to gain feedback from many industry and government interpretations of the standards, to increase the base of participation in the CALS initiative, and respond to the many requests for help that come from participants. Participants take part voluntarily, benefit by receiving and evaluation of their latest implementation (interpretation) of the standards, interact with the AFCTN technical staff, gain experience using the standards, and develop increased confidence in them. The results of informal tests are reported in Quick Short Test Reports (QSTRs) that briefly summarize the standard(s) tested, the hardware and software used, the nature of the test, and the results.

### 1.2 Purpose

The purpose of the informal test, reported in this QSTR, was to analyze ArborText's interpretation and use of the CALS standards in transferring technical publication data. ArobrText used its CALS Technical Data Interchange System to produce data, in accordance with the standards, and delivered it to the AFCTN technical staff on a 9-track magnetic tape.

#### 2. Test Parameters

Test Plan:

AFCTB 92-064

Date of

Evaluation:

14 October 1992

Evaluators:

George Elwood

Air Force CALS Test Bed

DET 2 HQ ESC/ENCP

Suite 300

4027 Colonel Glenn Hwy Dayton OH 45431-1672

Data

Originator:

Betty Lim

ArborText, Inc. 1000 Victors Way

Suite 400

Ann Arbor MI 48108

Data

Description:

Technical Manual Test

1 Document Declaration file

3 Document Type Definitions (DTD)

5 Initial Graphics Exchange Specification

(IGES) files

1 Text file
2 Raster files

2 Computer Graphics Metafile (CGM) files

Data

Source System:

IGES

HARDWARE

Unknown

SOFTWARE

ArborText Adept draw2iges

Text/Standard Generalized Markup Language (SGML)

HARDWARE

Unknown

SOFTWARE

ArborText Adept

Raster

HARDWARE

Unknown

SOFTWARE

ArborText Adept tiff2g4

CGM

HARDWARE

Unknown

SOFTWARE

ArborText Adept draw2cgm

Evaluation Tools Used:

MIL-STD-1840A (TAPE)

SUN 3/280

AFCTN Tapetool v1.2.8 UNIX XSoft CAPS/CALS v40.4

MIL-D-28000 (IGES)

Sun SparcStation 2

XSoft CAPS iges2ps ArborText iges2draw

IGES Data Analysis (IDA) Parser/Verifier

IDA IGESView v3.0

International TechneGroup Incorporated

(ITI) IGES/Works v1.0

Rosetta Technologies Preview v3.2

Cheetah Gold 486

Cadkey Cadkey v4.06

MIL-M-28001 (SGML)

Cheetah Gold 486

Exoterica XGMLNormalizer v1.2e3.2

#### MIL-R-28002 (Raster)

SUN SparcStation 2

ArborText g42tiff AFCTN validg4 AFCTN calstb.475

Island Graphics IslandPaint v3.0
Rosetta Technologies Prepare/Preview

Cheetah

Inset Systems HiJaak v2.02
Software Publishing Corporation
(SPC) Harvard Graphics v3.0
Corel Ventura Publisher

#### MIL-D-28003 (CGM)

SUN SparcStation 2

XSoft CAPS cgm2ps v6.0x ArborText cgm2draw Island Graphics IslandDraw v3.0

Sun 3/60

Advanced Technology Center (ATC) CGM-View R2.0

Cheetah Gold 486

ATC MetaView R1.12
ATC MetaCheck R2.05
SPC Harvard Graphics v3.0
Corel Ventura Publisher

Standards Tested:

MIL-STD-1840A MIL-D-28000A MIL-M-28001A MIL-R-28002A MIL-D-28003

### 3. 1840A Analysis

#### 3.1 External Packaging

The tape arrived at the Air Force CALS Test Bed (AFCTB) enclosed in a box in accordance with ASTM D 3951. The exterior of the box was marked with the magnetic tape warning label, as required by MIL-STD1840A, para. 5.3.1.3.

The tape was enclosed in a barrier bag material as required by MIL-STD-1840A, para. 5.3.1.2. Inspection of the tape reel showed the required label indicating the recording density as required by MIL-STD-1840A, para. 5.3.1. Enclosed in the box was a packing list showing all files recorded on the tape.

#### 3.2 Transmission Envelope

The 9-track tape received by the AFCTB contained MIL-STD-1840A files. The files were named per the standard conventions.

## 3.2.1 Tape Formats

The tape was run through the AFCTN  $Tapetool\ v1.2.8$  utility. No errors were encountered while evaluating the contents of the tape labels.

The tape was also read using XSoft CAPS read1840A without a reported problem.

#### 3.2.2 Declaration and Header Fields

No errors were found in the Document Declaration file header or data file headers.

#### 4. IGES Analysis

This tape contained six IGES files. All files were evaluated using IDA's Parser/Verifier set to check for the CALS Class I standards. No specific AFCTN errors were reported. Files D001Q007 and D001Q009 reported basic IGES errors. None of the files contained the required CALS statement defined in MIL-D-28000A, para. 3.2.1.3.1.

File D001Q007 was reported with multiple polynomial faults.

\*\*\* Entity type: 112

WARNING 2238: Polynomial segment (0) at D 23 is degenerate.

File D001Q009 was reported with a severe error with entity type 102.

\*\*\* Entity type: 102

SEVERE	2116:	Invalid	entity t	ype (D	21) fo	or composi	te curve at D	27.
102 102	35 1	0	1	0 0	0	0	000010101D 0D	27 28
102,2	,21,25	,0,1,23;					27P	35

The IGES files were imported into various software utilities available within the AFCTB. The two files discussed above were selected for the additional procedure. File D001Q007 was a drawing of a helicopter. The translation into Cadkey's Cadkey was made without a reported error. When the files were displayed and printed, the circles showing the station location were noted to have double lines.

The files were converted using ArborText's *iges2draw* utility without a reported error. When the resulting files were imported into Island Graphics' *IslandDraw*, the circles were noted as being filled.

The files were imported into IDA's *IGESView* without a reported errors. When the images were displayed and printed the circles were noted as being filled with a crosshatch.

The files were converted using Rosetta Technologies' Prepare and displayed using Preview. Errors were generated during the translation procedure, with some being unsupported entities. The resulting image displayed random line across the page and double circles were also noted.

The files were converted using XSoft's CAPS iges2ps utility. No errors were reported during the process. The resulting files displayed the double circles which were filled with a crosshatch.

The files were imported into ITI's *IGESWorks*. Errors were reported during this process relating to preceision and entity conflicts. The files displayed with the double circles noted. These circles were noted as being a different color and therefore an added entity.

File D001Q009 was also run through these same software packages. Cadkey's Cadkey translated the file with reported errors. The resulting image appeared to be correct. ArborText's iges2draw utility reported no errors and the displayed and printed image appeared to be correct.

IDA's *IGESView* filled the area with a solid and made the image unusable.

Rosetta Technologies' Prepare reported errors, with most being unsupported entities and other major IGES problems during the conversion, and displayed the background as a crosshatch.

The file was converted using XSoft's CAPS iges2ps utility. No errors were reported but the conversion took several minutes. The resulting files appear correct except that the crosshatching makes the text hard to read. The word "WORKS" also fell outside the defined boundary.

The file was imported into ITI's *IGESWorks* with reported errors. When the file was displayed parts of the image did not display or print.

The selected IGES files had problems in the other utilities available in the AFCTB. No CALS errors were reported from

the parser but the lack of the required CALS statement prevents these files from meeting the CALS MIL-D-28000A specification.

# 5. SGML Analysis

The Text file from this document was tested using Exoterica's XGMLNormalizer parser. This tape is a demonstration of the capability of ArborText's system. As part of the capability they broke the DTD up into sections, with each section containing added tags. The DTD parsed and the document also parsed without error. The DTD and Text files meet the CALS MIL-M-28001A specification.

#### 6. Raster Analysis

This tape contained two Raster files. Both files were reported as being valid CALS Raster files by the AFCTN validg4 utility.

The files were imported into the AFCTN calstb.475 utility. No problems were note. The images were straight and no orphan pixels were noted.

Both files were converted to an IMG format using Inset Systems' HiJaak and then imported into Corel's Ventura Publisher. No problems were reported during this procedure.

The files were converted using Rosetta Technologies' *Prepare* and viewed and printed using *Preview*. No problems were noted.

The files were converted using ArborText's g42tiff utility and imported into Island Graphics' IslandPaint. No problems were noted.

The Raster files meet the CALS MIL-R-28002A specification.

#### 7. CGM Analysis

The tape contained two CGM files. Both files were evaluated using ATC's MetaCheck with CALS options. This software reported that both files were valid files. File D001C010 was reported with some basic CGM errors.

The files were checked using the AFCTN validcgm utility. This utility reported that both files had errors. The errors were in both the basic CGM and CALS requirements.

Both files were imported into SPC's Harvard Graphics v3.0 without a reported problem. The images displayed and printed without problem.

Both files were imported into Corel's *Ventura Publisher* without a problem. The output is included in the Appendix to this report.

When the files were read into ATC's CGMView, nothing displayed on the screen. Several options were tried without luck. No error message was generated during this process.

The files were read into ATC's *MetaView* without reported problems. Both files were displayed.

The CGM files, based on the ATC MetaCheck report, meet the CALS MIL-D-28003 specification. The AFCTN validcgm is known to have a bug as a result errors have been listed.

#### 8. Conclusions and Recommendations

In summary, the tape from ArborText, Inc. was correct. IT could be read properly using the AFCTN *Tapetool* and XSoft read1840A without a reported error.

The IGES files, because of a lack of the MIL-D-28000A statement in the Start section, do not meet the CALS specification. The files were translated and printed using various IGES tools available with varying degrees of success.

The SGML's DTD and Text files were successfully parsed. The example provided by ArborText was complex, showing the ability of their software. The nature of the DTD required additional work during the parsing operation. The SGML files meet the CALS MIL-M-28001A specification.

The Raster files meet the CALS MIL-R-28002A specification. No problems were encountered while working with the files.

The CGM files meet the CALS MIL-D-28003 specification, using ATC's *MetaCheck* with CALS options. The files were successfully imported into various software applications without a problem.

The tape from ArborText meets the CALS MIL-STD-1840A requirements, with the exception of the IGES files.

# 9. Appendix A - Tapetool Report Logs

# 9.1 Tape Catalog

Air Force CALS Test Network Catalog Evaluation - Version 1.2; Release Number 8

#### Standards referenced:

ANSI X3.4 (1986) - Coded Character Sets - 7 Bit ASCII

Wed Oct 14 11:27:34 1992 MIL-STD-1840A File Catalog

File Set Directory: /cals/tapetool8/Set100

Page: 1

File Name	File Type	Record Format/ Bloc Length Length/	
D001	Document Declaration	D/00260 02048/0	
D001C006	CGM	F/00080 00800/0	
D001C010	CGM	F/00080 00800/0	000034 Extracted
D001G002	DTD	D/00260 02048/0	000002 Extracted
D001G014	DTD	D/00260 02048/0	000024 Extracted
D001G015	DTD	D/00260 02048/0	000002 Extracted
D001G016	DTD	D/00260 02048/0	000003 Extracted
D001H003	Output Specification	D/00260 02048/0	000044 Extracted
D001P017	PDL	D/00260 02048/0	000575 Extracted
D001Q004	IGES	F/00080 02000/0	000452 Extracted
D001Q007	IGES	F/00080 02000/0	000151 Extracted
D001Q008	IGES	F/00080 02000/0	000002 Extracted
D001Q009	IGES	F/00080 02000/0	000018 Extracted
D001Q012	IGES	F/00080 02000/0	000002 Extracted
D001Q013	IGES	F/00080 02000/0	000005 Extracted
D001R005	Raster	F/00128 02048/0	000005 Extracted
D001R011	Raster	F/00128 02048/0	000006 Extracted
D001T001	Text	D/00260 02048/0	000017 Extracted

Catalog Process terminated normally.

# 9.2 Tape Evaluation Log

Air Force CALS Test Network Tape Evaluation - Version 1.2; Release Number 8 Standards referenced:

ANSI X3.27 (1987) - File Structure and Labeling of Magnetic Tapes for Information Interchange

ANSI X3.4 (1986) - Coded Character Sets - 7 Bit ASCII

Wed Oct 14 11:25:57 1992

ANSI Tape Import Log

Allocating tape drive /dev/rmt0...

/dev/rmt0 allocated.

VOL1CALS01

nan

Label Identifier: VOL1
Volume Identifier: CALS01
Volume Accessibility:
Owner Identifier: nan
Label Standard Version: 4

HDR1D001

00010001000100 92286 99364 000000Unix4.2-mimos

Label Identifier: HDR1
File Identifier: D001
File Set Identifier:
File Section Number: 0001
File Sequence Number: 0001
Generation Number: 0001
Generation Version Number: 00

Creation Date: 92286
Expiration Date: 99364
File Accessibility:
Block Count: 000000

Implementation Identifier: Unix4.2-mimos

HDR2D0204800260

00

Label Identifier: HDR2 Recording Format: D Block Length: 02048 Record Length: 00260 Offset Length: 00 \*\*\*\*\*\*\*\* Tape Mark \*\*\*\*\*\*\*\*\*

Actual Block Size Found = 2048 Bytes.

Number of data blocks read = 1.

\*\*\*\*\*\*\*\* Tape Mark \*\*\*\*\*\*\*\*\*

EOF1D001

00010001000100 92286 99364 000001Unix4.2-mimos

Label Identifier: EOF1 File Identifier: D001 File Set Identifier:

File Section Number: 0001
File Sequence Number: 0001
Generation Number: 0001
Generation Version Number: 00

Creation Date: 92286 Expiration Date: 99364 File Accessibility:

Block Count: 000001

Implementation Identifier: Unix4.2-mimos

EOF2D0204800260

00

Label Identifier: EOF2
Recording Format: D
Block Length: 02048
Record Length: 00260
Offset Length: 00

\*\*\*\*\*\*\* Tape Mark \*\*\*\*\*\*\*\*\*

HDR1D001C006

00010002000100 92286 99364 000000Unix4.2-mimos

Label Identifier: HDR1
File Identifier: D001C006
File Set Identifier:

File Section Number: 0001
File Sequence Number: 0002
Generation Number: 0001

Generation Version Number: 00

Creation Date: 92286
Expiration Date: 99364
File Accessibility:
Block Count: 000000

Implementation Identifier: Unix4.2-mimos 00 HDR2F0080000080 Label Identifier: HDR2 Recording Format: F Block Length: 00800 Record Length: 00080 Offset Length: 00 \*\*\*\*\*\*\* Tape Mark \*\*\*\*\*\*\*\*\* Actual Block Size Found = 800 Bytes. Number of data blocks read = 26. \*\*\*\*\*\*\*\* Tape Mark \*\*\*\*\*\*\*\*\* EOF1D001C006 00010002000100 92286 99364 000026Unix4.2-mimos Label Identifier: EOF1 File Identifier: D001C006 File Set Identifier: File Section Number: 0001 File Sequence Number: 0002 Generation Number: 0001 Generation Version Number: 00 Creation Date: 92286 Expiration Date: 99364 File Accessibility: Block Count: 000026 Implementation Identifier: Unix4.2-mimos EOF2F0080000080 00 Label Identifier: EOF2 Recording Format: F Block Length: 00800 Record Length: 00080 Offset Length: 00 \*\*\*\*\*\*\*\*\* Tape Mark \*\*\*\*\*\*\*\*\*\* <<<< PART OF LOG REMOVED HERE >>>> \*\*\*\*\*\*\*\* Tape Mark \*\*\*\*\*\*\*\*\*\*

HDR1D001T001

00010018000100 92286 99364 000000Unix4.2-mimos

Label Identifier: HDR1 File Identifier: D001T001 File Set Identifier:

File Section Number: 0001 File Sequence Number: 0018 Generation Number: 0001

Generation Version Number: 00

Creation Date: 92286
Expiration Date: 99364
File Accessibility:
Block Count: 000000

Implementation Identifier: Unix4.2-mimos

HDR2D0204800260

00

Label Identifier: HDR2
Recording Format: D
Block Length: 02048
Record Length: 00260
Offset Length: 00

\*\*\*\*\*\*\* Tape Mark \*\*\*\*\*\*\*\*\*

Actual Block Size Found = 2048 Bytes.

Number of data blocks read = 17.

\*\*\*\*\*\* Tape Mark \*\*\*\*\*\*\*\*\*

EOF1D001T001

00010018000100 92286 99364 000017Unix4.2-mimos

Label Identifier: EOF1
File Identifier: D001T001
File Set Identifier:

File Section Number: 0001 File Sequence Number: 0018 Generation Number: 0001 Generation Version Number: 00

Creation Date: 92286
Expiration Date: 99364
File Accessibility:
Block Count: 000017

Implementation Identifier: Unix4.2-mimos

EOF2D0204800260

00

Label Identifier: EOF2
Recording Format: D
Block Length: 02048
Record Length: 00260
Offset Length: 00

\*\*\*\*\*\*\*\* Tape Mark \*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\* Tape Mark \*\*\*\*\*\*\*\*\*

######### End of Volume CALS01 ##############

######### End Of Tape File Set ###############

Deallocating /dev/rmt0...

Tape Import Process terminated normally.

### 9.3 Tape File Set Validation Log

Air Force CALS Test Network File Set Evaluation - Version 1.2; Release Number 8 Standards referenced:

MIL-STD-1840A (1987) - Automated Interchange of Technical Information MIL-R-28002 (1989) - Raster Graphics Representation In Binary Format, Requirements For

Wed Oct 14 11:27:34 1992

MIL-STD-1840A File Set Evaluation Log

File Set: Set100

Found file: D001

Extracting Document Declaration Header Records... Evaluating Document Declaration Header Records...

srcsys: ArborText

srcdocid: ati\_1840\_demo

srcrelid: NONE chglvl: ORIGINAL dteisu: 19920924 dstsys: NONE

dstdocid: ati\_1840\_demo

dstrelid: NONE dtetrn: 19920924 dlvacc: NONE

filcnt: T1,G4,H1,Q6,R2,C2,P1

ttlcls: UNCLASSIFIED
doccls: UNCLASSIFIED
doctyp: Technical Order

docttl: NONE

Found file: D001C006

Extracting CGM Header Records...
Evaluating CGM Header Records...

srcdocid: ati\_1840\_demo
dstdocid: ati\_1840\_demo

txtfilid: W
figid: NONE
srcgph: testlcgm

doccls: UNCLASSIFIED

notes: NONE

Saving CGM Header File: D001C006\_HDR Saving CGM Data File: D001C006\_CGM

Found file: D001C010

Extracting CGM Header Records...
Evaluating CGM Header Records...

srcdocid: ati\_1840\_demo
dstdocid: ati\_1840\_demo

txtfilid: W
figid: NONE
srcgph: test2cgm
doccls: UNCLASSIFIED

notes: NONE

Saving CGM Header File: D001C010\_HDR Saving CGM Data File: D001C010\_CGM

Found file: D001G002

Extracting DTD Header Records...
Evaluating DTD Header Records...

srcdocid: ati\_1840\_demo
dstdocid: ati\_1840\_demo

notes: DTD

Saving DTD Header File: D001G002\_HDR Saving DTD Data File: D001G002\_DTD

Found file: D001G014

Extracting DTD Header Records...
Evaluating DTD Header Records...

srcdocid: ati\_1840\_demo
dstdocid: ati 1840\_demo

notes: DTD. MIL-M-28001B Draft Template DTD. Referenced in the main DTD.

Saving DTD Header File: D001G014\_HDR Saving DTD Data File: D001G014\_DTD

Found file: D001G015

Extracting DTD Header Records...
Evaluating DTD Header Records...

srcdocid: ati\_1840\_demo
dstdocid: ati\_1840\_demo

notes: Electronic Review DTD subset, defined in MIL-M-28001B, Appendix C

Saving DTD Header File: D001G015\_HDR Saving DTD Data File: D001G015\_DTD

Found file: D001G016
Extracting DTD Header Records...
Evaluating DTD Header Records...

srcdocid: ati\_1840\_demo
dstdocid: ati\_1840\_demo

notes: ArborText Math Pack DTD subset.

Saving DTD Header File: D001G016\_HDR Saving DTD Data File: D001G016\_DTD

Found file: D001H003

Extracting Output Specification Header Records...
Evaluating Output Specification Header Records...

srcdocid: ati\_1840\_demo
dstdocid: ati\_1840\_demo

notes: FOSI

Saving Output Specification Header File: D001H003\_HDR Saving Output Specification Data File: D001H003\_OS

Found file: D001P017

Extracting PDL Header Records...
Evaluating PDL Header Records...

srcdocid: ati\_1840\_demo
dstdocid: ati\_1840\_demo

txtfilid: W

doccls: UNCLASSIFIED

notes: PostScript version of this document.

Saving PDL Header File: D001P017\_HDR Saving PDL Data File: D001P017\_PDL

Found file: D001Q004

Extracting IGES Header Records...
Evaluating IGES Header Records...

srcdocid: ati\_1840\_demo
dstdocid: ati\_1840\_demo

txtfilid: W figid: NONE

srcgph: testliges
doccls: UNCLASSIFIED

notes: NONE

Saving IGES Header File: D001Q004\_HDR Saving IGES Data File: D001Q004\_IGS

Found file: D001Q007

Extracting IGES Header Records...
Evaluating IGES Header Records...

srcdocid: ati\_1840\_demo
dstdocid: ati\_1840\_demo

txtfilid: W figid: NONE

srcgph: test2iges
doccls: UNCLASSIFIED

notes: NONE

Saving IGES Header File: D001Q007\_HDR Saving IGES Data File: D001Q007\_IGS

Found file: D001Q008

Extracting IGES Header Records...
Evaluating IGES Header Records...

srcdocid: ati\_1840\_demo
dstdocid: ati\_1840\_demo

txtfilid: W
figid: NONE

srcgph: warningicon
doccls: UNCLASSIFIED

notes: NONE

Saving IGES Header File: D001Q008\_HDR Saving IGES Data File: D001Q008\_IGS

Found file: D001Q009

Extracting IGES Header Records...
Evaluating IGES Header Records...

srcdocid: ati\_1840\_demo
dstdocid: ati\_1840\_demo

txtfilid: W
figid: NONE
srcgph: seal

doccls: UNCLASSIFIED

notes: NONE

Saving IGES Header File: D001Q009\_HDR Saving IGES Data File: D001Q009\_IGS

Found file: D001Q012

Extracting IGES Header Records...
Evaluating IGES Header Records...

srcdocid: ati\_1840\_demo
dstdocid: ati\_1840\_demo

txtfilid: W figid: NONE

srcgph: cautionicon
doccls: UNCLASSIFIED

notes: NONE

Saving IGES Header File: D001Q012\_HDR Saving IGES Data File: D001Q012\_IGS

Found file: D001Q013

Extracting IGES Header Records...
Evaluating IGES Header Records...

srcdocid: ati\_1840\_demo
dstdocid: ati\_1840\_demo

txtfilid: W
figid: NONE

srcgph: firehazard
doccls: UNCLASSIFIED

notes: NONE

Saving IGES Header File: D001Q013\_HDR Saving IGES Data File: D001Q013\_IGS

Found file: D001R005

Extracting Raster Header Records...
Evaluating Raster Header Records...

srcdocid: ati\_1840\_demo
dstdocid: ati\_1840\_demo

txtfilid: W
figid: NONE
srcgph: test2g4
doccls: UNCLASSIFIED

rtype: 1

rorient: 000,270

rpelcnt: 002096,001500

rdensty: 0300 notes: NONE

Saving Raster Header File: D001R005\_HDR Saving Raster Data File: D001R005 GR4

Found file: D001R011

Extracting Raster Header Records... Evaluating Raster Header Records...

srcdocid: ati\_1840\_demo dstdocid: ati\_1840\_demo

txtfilid: W figid: NONE srcgph: test1g4 doccls: UNCLASSIFIED

rtype: 1

rorient: 000,270

rpelcnt: 000720,000713

rdensty: 0300 notes: NONE

Saving Raster Header File: D001R011 HDR Saving Raster Data File: D001R011\_GR4

Found file: D001T001

Extracting Text Header Records... Evaluating Text Header Records...

srcdocid: ati\_1840\_demo dstdocid: ati\_1840\_demo

txtfilid: W

doccls: UNCLASSIFIED

notes: SGML

Saving Text Header File: D001T001\_HDR Saving Text Data File: D001T001\_TXT

Evaluating numbering scheme...

No errors were encountered during numbering scheme evaluation. Numbering scheme evaluation complete.

Checking file count...

No errors were encountered during file count verification.

File Count verification complete.

No errors were encountered in Document D001.

No errors were encountered in this File Set.

MIL-STD-1840A File Set Evaluation Complete.

# 9.4 Other Tape Reading Logs

Include other log here if errors were reported.

# 10. Appendix B - Detailed IGES Analysis

#### 10.1 File D001Q007

# 10.1.1 Parser/Verifier Log

```
*** IGES DATA FILE ANALYSIS ***
         *** MARCH 1992 ***
             IGES Data Analysis
               (708) 449-3430
Input file is D001Q007_IGS
Checking conformance to CALS Class I (MIL-D-28000A 2/10/92)
Today is October 14, 1992 2:05 PM
*** File and Product Name Information ***
  File name from sender = './C1840_TAPE_IMAGE/d001q007.data'
  File creation Date.Time = '920924.182541'
  Model change Date.Time = ''
                          = 11
  Author
                          = ' '
  Department
  Product name from sender = 'ati_1840_demo/test2iges'
  Destination product name = ''
*** Parameter Delimiters ***
  Delimiter = ','
  Terminator = ';'
*** Originating System Data ***
                        = 'ArborText Inc. - IslandDraw'
   System ID
  Preprocessor version = 'draw2iges Version 3.0'
   Specification version = 6 (IGES 4.0)
*** Precision levels ***
   Integer bits = 16
   Floating point - Exponent = 308 Mantissa = 15
  Double precision - Exponent = 308 Mantissa = 15
*** Global Model Data ***
```

Model scale = 1.0000E+00

Unit flag = 2 Units = 'MM' Line weights = 1000

Maximum line thickness = 1.000000E+01
Minimum line thickness = 1.000000E-02
Granularity = 1.000000E-02
Maximum coordinate = 1.829040E+02

Drafting standard applicable to original data is not specified.

#### \*\*\* Status Flag Summary \*\*\*

Blank status:	Visible	573
	Blanked	14
Independence:	Independent	567
-	Physically Subordinate	14
	Logically Subordinate	6
	Totally Subordinate	0
Entity use:	Geometry	0
-	Annotation	587
	Definition	0
	Other	0
	Logical/Positional	0
	2D parametric	0
	Not Specified	0
Hierarchy:	Structure DE applies	0
_	Subordinate DE applies	587
	Hierarchy property applies	0
	Not Specified	0

#### \*\*\* Entity Occurrence Counts \*\*\*

Entity	Form	Level	Count	Type
100	0	0	11	Circular arc
112	0	0	518	Parametric spline curve
212	0	0	37	General note
230	0	0	14	Sectioned area (Standard Crosshatching)
404	0	0	1	Drawing
406	16	0	1	Property - Drawing size

```
406 8301 0 1 IDA Property - Text style
+ 406 8305 0 3 Implementor entity instance
410 0 0 1 View - Orthographic parallel
```

+ Indicates use of a Implementor defined form or entity.

\*\*\* Entity Count by Level \*\*\*

Level Count 0 587

\*\*\* Labeling Information \*\*\*

0% of the entities are labeled.

Unlabeled 587

\*\*\* Line Fonts Used in Data \*\*\*

100 102 104 106 108 110 112 114 Undefined - Solid 518 11 - Dashed - Phantom - Center-line Dotted User defined 116 118 120 122 124 125 126 128 Undefined Solid Dashed - Phantom - Center-line - Dotted User defined 130 132 134 136 138 140 142 144 Undefined Solid - Dashed Phantom - Center-line

```
_ _ - - - - Dotted _ - - - User defined
```

#### \*\*\* Line Widths Used in Data \*\*\*

Weight	Count	Width
Defaulted	48	(0.0100)
1	21	(0.0100)
11	481	(0.1100)
7	6	(0.0700)
17	13	(0.1700)
10	14	(0.1000)
12	4	(0.1200)

#### \*\*\* Colors Used in Data \*\*\*

Defaulted	21
Black	544
White	22

\*\*\* Entity type: 100

#### \*\*\* Entity type: 112

```
WARNING 2238: Polynomial segment (0) at D 23 is degenerate.

WARNING 2238: Polynomial segment (1) at D 23 is degenerate.

WARNING 2238: Polynomial segment (2) at D 23 is degenerate.

WARNING 2238: Polynomial segment (3) at D 23 is degenerate.

WARNING 2238: Polynomial segment (4) at D 23 is degenerate.

WARNING 2238: Polynomial segment (5) at D 23 is degenerate.

WARNING 2238: Polynomial segment (7) at D 23 is degenerate.

WARNING 2238: Polynomial segment (8) at D 23 is degenerate.

WARNING 2238: Polynomial segment (9) at D 23 is degenerate.

WARNING 2238: Polynomial segment (10) at D 23 is degenerate.

WARNING 2238: Messages regarding degenerate polynomial segment suppressed.
```

#### \*\*\* Entity type: 212

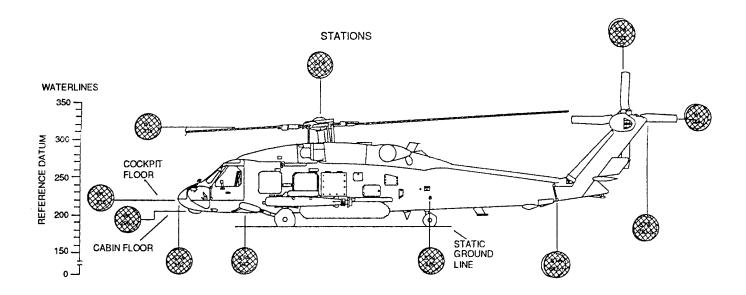
37 text strings in data file.

```
Average text aspect ratio in file is 0.8335565.
      Minimum text aspect ratio in file is 0.6864177.
      Maximum text aspect ratio in file is 1.0288039.
      FONTS USED IN FILE
      FONT COUNT NAME
         1 37 Default ASCII Style
 *** Entity type: 230
*** Entity type: 404
Drawing at D 5 contains 1 views.
Drawing at D
               5 contains 0 annotation entities.
 *** Entity type: 406
 *** Entity type: 410
  Scale of view at D 1 is 1.000000E+00.
Orthographic View entity at D 1 has 0 clipping planes specified.
  XMIN = Not Set XMAX = Not Set
  YMIN = Not Set
                     YMAX = Not Set
   ZMIN = Not Set
                     ZMAX = Not Set
 *** Message Summary ***
2015: 626 Mathematically incorrect definitions.
 *** Error Summary ***
    0 fatal errors
    0 severe errors
```

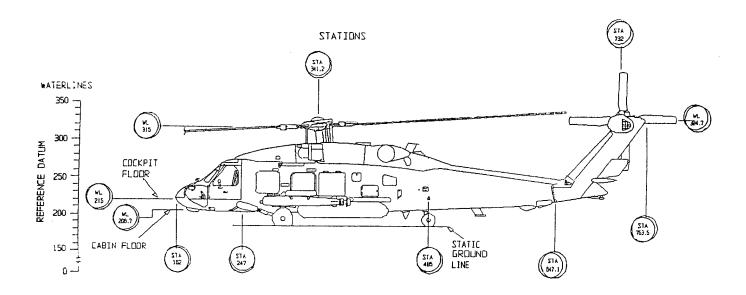
\*\*\* End of Analysis of D001Q007\_IGS \*\*\*

0 errors 626 warnings 0 cautions 0 nitpicks 0 notes

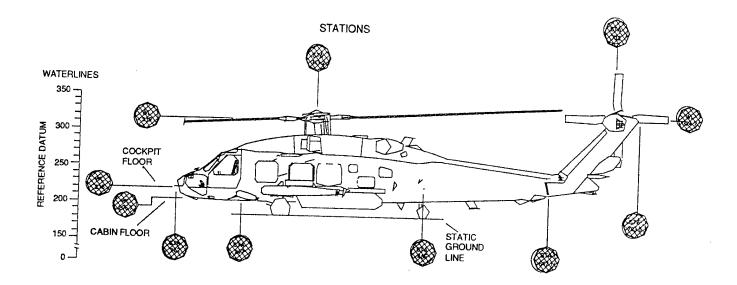
## 10.1.2 Output iges2ps



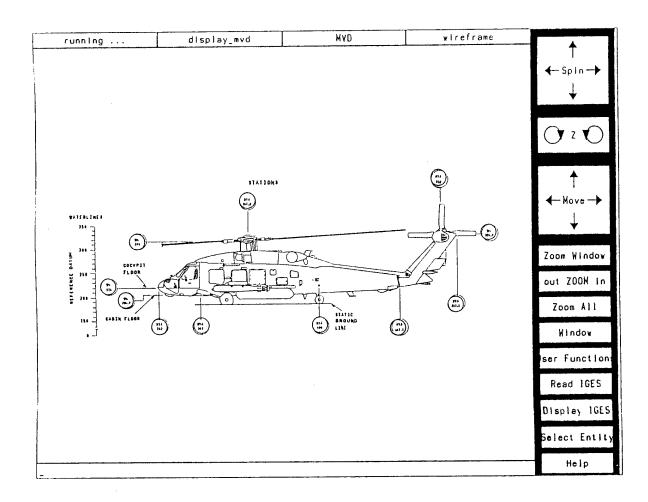
# 10.1.3 Output Cadkey v4.06



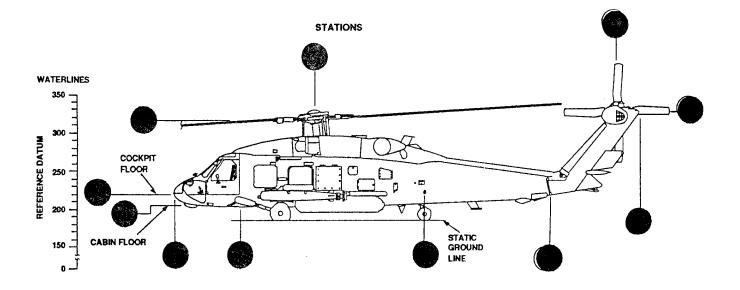
## 10.1.4 Output IGESView



# 10.1.5 Output IGESWorks



# 10.1.6 Output IslandDraw



### 10.1.7 Preview Error Log

ERROR REPORT FOR FILE /mnt/Set100/D001/D001Q007\_IGS

>> File record length is 80

Terminate section report :

File Section	#lines	. 1
START	1	ļ
GLOBAL DIRECTORY ENTRY	3 1174	1
PARAMETER DATA	2572	İ
TERMINATE	1	
TOTAL	3751	į
/Export 00 Y 3751 - 3	00080 but	

(Expect 80 X 3751 = 300080 bytes)

----- preliminary format scan complete -----

- >> WARNING: Cannot use maximum power of 10 requested.
  - : Requested maximum power of 308 using 307.
  - : Field 9 line 2 of GLOBAL section. (Max. Exp. for Single)

27HArborText Inc. - IslandDraw, 21Hdraw2iges Version 3.0,16,308,15,308, G

>> WARNING: Unsupported sectioned area type 19 modified to 16

: in entity 496 for graphic output.

\_\_\_\_\_\_

<><< PART OF LOG REMOVED HERE >>>>

>> WARNING: Unsupported sectioned area type 19 modified to 16

: in entity 502 for graphic output.

\_\_\_\_\_\_

<<<<< PART OF LOG REMOVED HERE >>>>

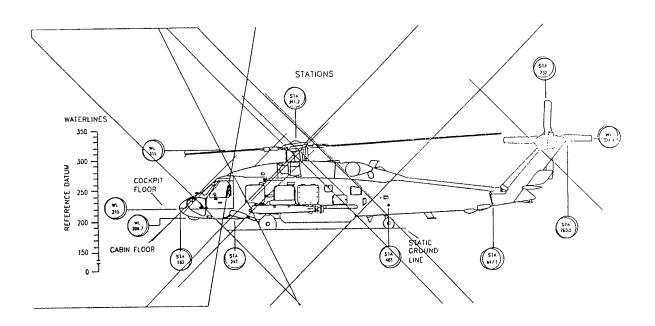
>> WARNING: Unsupported sectioned area type 19 modified to 16

: in entity 536 for graphic output.

\_\_\_\_\_\_

Found 0 errors and 30 warnings

## 10.1.8 Preview Output



### 10.2 File D001Q009

### 10.2.1 Paser/Verifier Log

```
*** IGES DATA FILE ANALYSIS ***
                  MARCH 1992
         ***
                                   ***
         *** IGES Data Analysis
               (708) 449-3430
Input file is D001Q009_IGS
Checking conformance to CALS Class I (MIL-D-28000A 2/10/92)
Today is October 14, 1992 2:06 PM
*** File and Product Name Information ***
  File name from sender = './C1840_TAPE_IMAGE/d001q009.data'
  File creation Date.Time = '920924.182605'
  Model change Date.Time = ''
                          = '''
  Author
  Department
  Product name from sender = 'ati_1840_demo/calsatwork'
  Destination product name = ''
*** Parameter Delimiters ***
  Delimiter = ','
  Terminator = ';'
*** Originating System Data ***
   System ID
                      = 'ArborText Inc. - IslandDraw'
   Preprocessor version = 'draw2iges Version 3.0'
  Specification version = 6 (IGES 4.0)
*** Precision levels ***
  Integer bits = 16
  Floating point - Exponent = 308 Mantissa =
  Double precision - Exponent = 308 Mantissa =
*** Global Model Data ***
                    = 1.0000E+00
  Model scale
  Unit flag
```

Units = 'MM' Line weights = 1000

Maximum line thickness = 1.000000E+01
Minimum line thickness = 1.000000E-02
Granularity = 1.000000E-02
Maximum coordinate = 8.002800E+01

Drafting standard applicable to original data is not specified.

#### \*\*\* Status Flag Summary \*\*\*

Blank status:	Visible	43
	Blanked	9
Independence:	Independent	15
-	Physically Subordinate	27
	Logically Subordinate	10
	Totally Subordinate	0
Entity use:	Geometry	0
	Annotation	52
	Definition	0
	Other	0
	Logical/Positional	0
	2D parametric	0
	Not Specified	0
Hierarchy:	Structure DE applies	0
-	Subordinate DE applies	52
	Hierarchy property applies	0
	Not Specified	0

#### \*\*\* Entity Occurrence Counts \*\*\*

Entity	Form	Level	Count	Type
102	0	0	9	Composite curve
106	11	0	9	Copious data - Piecewise planar, linear string(2D
path)				
110	0	0	9	Line
212	0	0	5	General note
230	0	0	9	Sectioned area (Standard Crosshatching)
404	0	0	1	Drawing
406	16	0	1	Property - Drawing size
406	8300	0	1	IDA Property - Ignore entity

	406	8301	0	2	IDA Property - Text style
	406	8303	0	1	IDA Property - Pattern code
+	406	8305	0	4	Implementor entity instance
	410	0	0	1	View - Orthographic parallel

+ Indicates use of a Implementor defined form or entity.

\*\*\* Entity Count by Level \*\*\*

Level Count 0 52

\*\*\* Labeling Information \*\*\*

0% of the entities are labeled.

Unlabeled 52

\*\*\* Line Fonts Used in Data \*\*\*

100 102 104 106 108 110 112 114

- - - - - - - Undefined
- 9 - 9 - 9 - - Solid
- - - - - - - Dashed
- - - - - - - - Phantom
- - - - - - - Dotted
- - - - - - - Undefined
User defined

116 118 120 122 124 125 126 128

- - - - - - - Undefined
- - - - - - - - Solid
- - - - - - - - Dashed
- - - - - - - - Phantom
- - - - - - - Dotted

- - - - - - User defined

130 132 134 136 138 140 142 144

- - - - - - Undefined - - - - - - - - Solid - - - - - - - - Phantom

```
- Center-line
                                                                                                                                - Dotted
                                                                                                                                             User defined
   *** Line Widths Used in Data ***
                                                          Count
                                                                                             Width
                 Weight
                                                                                           (0.0100)
                                                             0
      Defaulted
                                                              38
                                                                                           (0.0100)
                      1
                                                                                           (0.1000)
                                                             12
                    10
                                                                                           (0.7000)
                                                             2
                     70
   *** Colors Used in Data ***
                                                              29
      Defaulted
                                                              17
                    Black
                     White
                                                                6
    ***** ENTITY ANALYSIS *****
    *****
    *** Entity type: 102
                                                                                                                                                21) for composite curve at D
                                                                                                                                                                                                                                                                    27.
SEVERE 2116: Invalid entity type (D
                                                                                                                                                31) for composite curve at D
 SEVERE 2116: Invalid entity type (D
                                                                                                                                                49) for composite curve at D
                                                                                                                                                                                                                                                                    53.
SEVERE 2116: Invalid entity type (D
                                                                                                                                                                                                                                                                    61.
                                                                                                                                                57) for composite curve at D
SEVERE 2116: Invalid entity type (D
SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity type (D SEVERE 2116: Invalid entity ty
                                                                                                                                                                                                                                                                     69.
                                                                                                                                                                                                                                                                    77.
                                                                                                                                                                                                                                                                  85.
                                                                                                                                                                                                                                                                  93.
                                                                                                                                                                                                                                                                  101.
    *** Entity type: 106
    *** Entity type: 110
                                                                                                                                             25.
 CAUTION 2336: Zero length line at D
 CAUTION 2336: Zero length line at D
                                                                                                                                             33.
```

51.

59.

67.

CAUTION 2336: Zero length line at D

CAUTION 2336: Zero length line at D

CAUTION 2336: Zero length line at D

```
CAUTION 2336: Zero length line at D
                                    83.
CAUTION 2336: Zero length line at D
CAUTION 2336: Zero length line at D
                                      91.
CAUTION 2336: Zero length line at D
        9 lines averaging 0.000000E+00 units --
 *** Entity type: 212
      5 text strings in data file.
      Average text aspect ratio in file is 0.9539368.
      Minimum text aspect ratio in file is 0.8765428.
      Maximum text aspect ratio in file is 1.0668717.
      FONTS USED IN FILE
      FONT COUNT NAME
                 5 Default ASCII Style
 *** Entity type: 230
 *** Entity type: 404
Drawing at D
                5 contains 1 views.
Drawing at D 5 contains 0 annotation entities.
 *** Entity type: 406
 *** Entity type: 410
  Scale of view at D 1 is 1.000000E+00.
Orthographic View entity at D 1 has 0 clipping planes specified.
  XMIN = Not Set XMAX = Not Set
  YMIN = Not Set YMAX = Not Set ZMIN = Not Set ZMAX = Not Set
*** Message Summary ***
2002: 9 Invalid entity referenced, Wire Frame Geometry.
2015: 9 Mathematically incorrect definitions.
*** Error Summary ***
    0 fatal errors
```

- 9 severe errors
- 0 errors
- 0 warnings
- 9 cautions
- 0 nitpicks
- 0 notes

\*\*\* End of Analysis of D001Q009\_IGS \*\*\*

### 10.2.2 Cadkey v4.06 Error Log

\arbor\q009.igs -> \arbor\q009.prt IGES version - 4.0 Date of creation: 09/24/92

#### Start section:

- Entity types do not match at PARAMETER index 27 Found entity type 102, expected type 106
- Entity types do not match at PARAMETER index 35 Found entity type 102, expected type 106
- Entity types do not match at PARAMETER index 53 Found entity type 102, expected type 106
- Entity types do not match at PARAMETER index 61 Found entity type 102 , expected type 106
- Entity types do not match at PARAMETER index 69 Found entity type 102, expected type 106
- Entity types do not match at PARAMETER index 77 Found entity type 102 , expected type 106
- Entity types do not match at PARAMETER index 85 Found entity type 102, expected type 106
- Entity types do not match at PARAMETER index 93 Found entity type 102, expected type 106
- Entity types do not match at PARAMETER index 101 Found entity type 102, expected type 106

#### Entities Translated:

- 5 (212) General Note type
- 9 (230) Sectioned Area type
- 1 (404) Drawing type
- 1 (410) View type

#### Entities Not Translated:

9 (406) Property type

#### Special Notes

9 zero length lines encountered

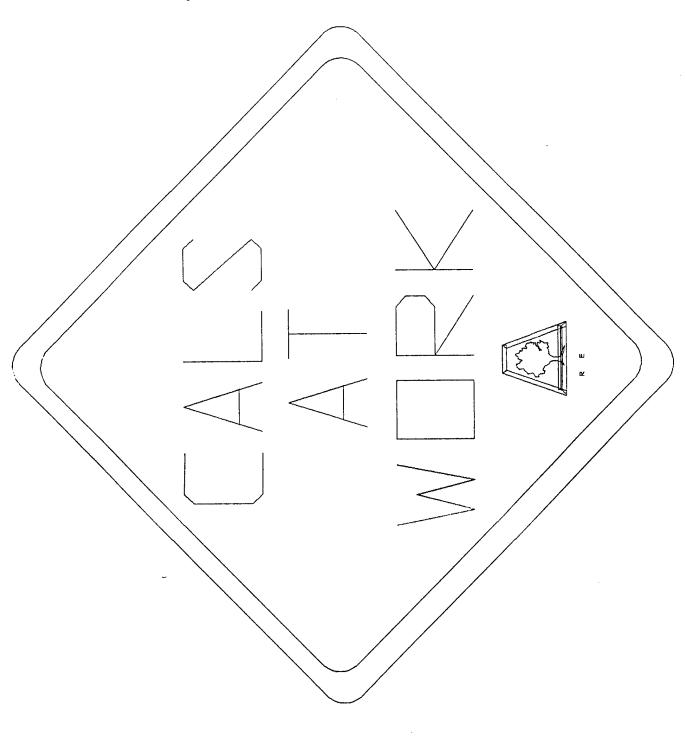
9 Sectioned area(s) form 0 or 19 encountered.
 (Only boundaries and islands processed)
 View Entities

View at D:1 placed in Level #241

Drawing Entities

Drawing at D:5 placed in Level #241 and contains 1 views

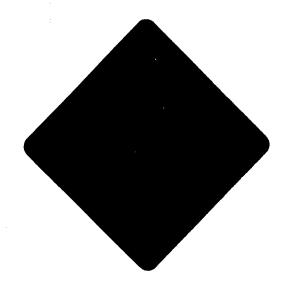
# 10.2.3 Cadkey Output



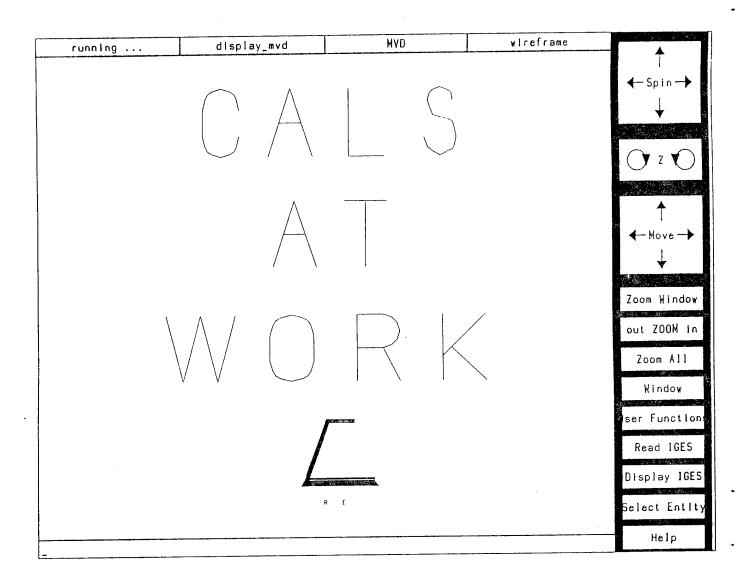
# 10.2.4 Output iges2ps



# 10.2.5 Output IGESView



## 10.2.6 Output IGESWorks



# 10.2.7 Output IslandDraw



### 10.2.8 Preview Error Log

ERROR REPORT FOR FILE /mnt/Set100/D001/D001Q009\_IGS

>> File record length is 80

Terminate section report :

File Section	#lines
START	1 1
GLOBAL	4
DIRECTORY ENTRY	104
PARAMETER DATA	322
TERMINATE	1
	1
TOTAL	432
(Expect 80 X 432 =	34560 bytes)

```
----- preliminary format scan complete
>> WARNING: Cannot use maximum power of 10 requested.
     : Requested maximum power of 308 using 307.
     : Field 9 line 3 of GLOBAL section. (Max. Exp. for Single)
21Hdraw2iges Version 3.0,16,308,15,308,15,,1.,2,2HMM,1000,10.,
     _____
>> WARNING: Cannot use maximum power of 10 requested.
    : Requested maximum power of 308 using 307.
     : Field 11 line 3 of GLOBAL section. (Max. Exp. for Double)
21Hdraw2iges Version 3.0,16,308,15,308,15,,1.,2,2HMM,1000,10.,
     ______
>> WARNING: Sectioned Area type 19 not supported
     : Reading entity #15, DE entry #29 type SECTIONED AREA.
   : Field 2, line 36 of PARAMETER DATA section.
```

230,27,19,0.,0.,0.,1.,0.7071,0,0,2,17,15; 29P 36106 \_\_\_\_\_

>> WARNING: Sectioned Area type 19 not supported

: Reading entity #19, DE entry #37 type SECTIONED AREA.

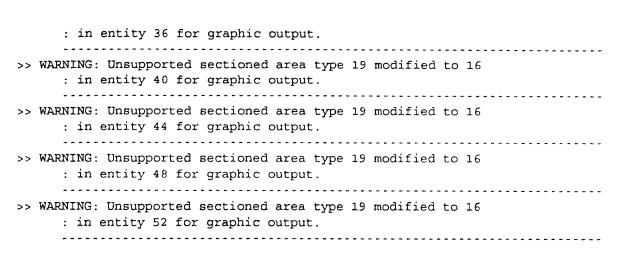
: Field 2, line 53 of PARAMETER DATA section.

230,35,19,0.,0.,0.,1.,0.7071,0,0,2,17,15; 37P 53406 

>> WARNING: Sectioned Area type 19 not supported

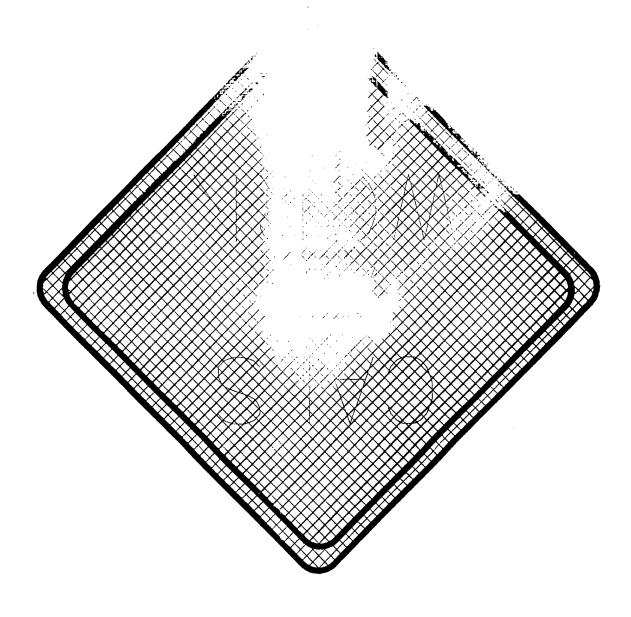
: Reading entity #28, DE entry #55 type SECTIONED AREA.

: Field 2, line 66 of PARAMETER DATA section. 230,53,19,0.,0.,1.,0.7071,0,0,1,47;	55P	66106
<pre>&gt;&gt; WARNING: Sectioned Area type 19 not supported</pre>	63P	71106
>> WARNING: Sectioned Area type 19 not supported : Reading entity #36, DE entry #71 type SECTIONED AREA. : Field 2, line 76 of PARAMETER DATA section. 230,69,19,0.,0.,0.,1.,0.7071,0,0,1,19;	71P	76106
>> WARNING: Sectioned Area type 19 not supported : Reading entity #40, DE entry #79 type SECTIONED AREA. : Field 2, line 307 of PARAMETER DATA section. 230,77,19,0.,0.,1.,0.7071,0,0,1,19;	79₽	307106
<pre>&gt;&gt; WARNING: Sectioned Area type 19 not supported</pre>	87P	312106
<pre>&gt;&gt; WARNING: Sectioned Area type 19 not supported</pre>	95P	317106
>> WARNING: Sectioned Area type 19 not supported : Reading entity #52, DE entry #103 type SECTIONED AREA. : Field 2, line 322 of PARAMETER DATA section. 230,101,19,0.,0.,0.,1.,0.7071,0,0,1,19;	103P	322S
>> WARNING: Unsupported sectioned area type 19 modified to 16 : in entity 15 for graphic output.		
>> WARNING: Unsupported sectioned area type 19 modified to 16 : in entity 19 for graphic output.		
>> WARNING: Unsupported sectioned area type 19 modified to 16 : in entity 28 for graphic output.		
>> WARNING: Unsupported sectioned area type 19 modified to 16 : in entity 32 for graphic output.		
>> WARNING: Unsupported sectioned area type 19 modified to 16		



Found 0 errors and 20 warnings

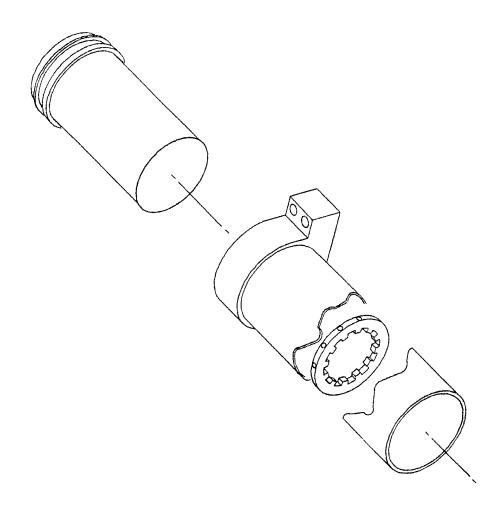
# 10.2.9 Preview Output



- 11. Appendix C Detailed Raster Analysis
- 11.1 File D001R005 D001R011
- 11.1.1 Output IslandPaint



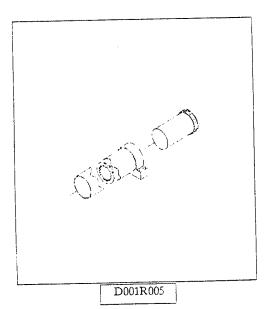
# 11.1.2 Output Preview - D001R005



# 11.1.3 Output Preview - D001R011



## 11.1.4 Output Ventura Publisher





### 12. Appendix D - Detailed CGM Analysis

#### 12.1 File D001C006

### 12.1.1 Parser Log MetaCHECK

MetaCHECK Version 2.05 -- CGM/MIL-D-28003 Conformance Analyzer Copyright 1988-91 CGM Technology Software Execution Date: 10/14/92 Time: 13:55:47 Metafile Examined : \arbor\c006.cgm Pictures Examined : All Elements Examined : All Bytes Examined : All Tracing not selected. ======= CGM Conformance Violation Report ========== No Errors Detected ======= CALS CGM Profile (MIL-D-28003) Report ========= No profile discrepancies detected. ======== Conformance Summary Report =========== MetaCHECK Version 2.05 -- CGM/MIL-D-28003 Conformance Analyzer Copyright 1988-91 CGM Technology Software Execution Date: 10/14/92 Time: 13:55:51 Name of CGM under test: \arbor\c006.cgm Encoding : Binary Pictures Examined : All Elements Examined : All Examined : All Bytes BEGIN METAFILE string : "ati 1840 demo/test1cgm" METAFILE DESCRIPTION : "Arbor Text draw2cgm version 1.06 \*\*\* MIL-D-28003/BASIC-1"

```
Picture 1 starts at octet offset 172; string contains: ""

Conformance Summary: This file conforms to the CGM specification.

This file meets the CALS CGM Profile (MIL-D-28003).

Summary of Testing Performed and Errors Found:
```

1 Pictures Tested 180 Elements Tested 19640 Octets Tested

```
No Errors Were Detected
```

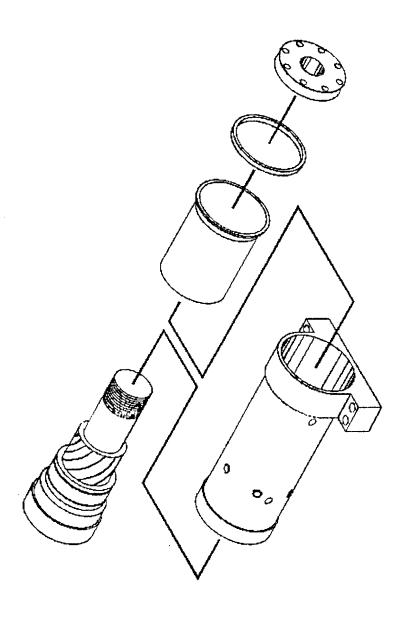
========= End of Conformance Report ==============

### 12.1.2 validegm Log

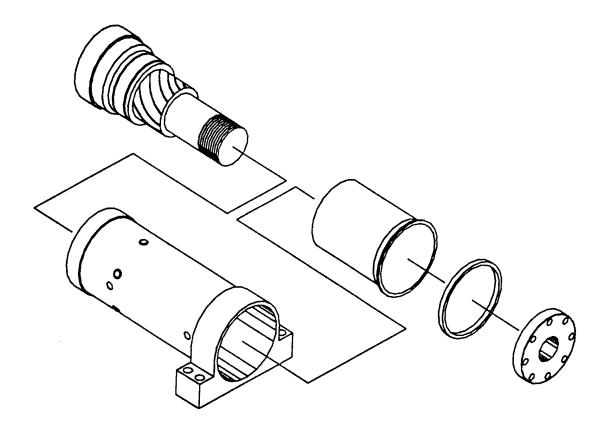
```
Analysis for file c006.cgm using table table
ERROR: invalid times used per CGM (2), std B
ERROR: invalid times used per Picture (2), std B
                               Metafile Defaults Replacement
                 (1, 12, 10)
(14, 150)
ERROR: illegal in this state (2), std B
ERROR: required precursor (0, 3) not yet seen
                               VDC Extent (0, 0) (32767, 32767)
(14.1, 0)
                (2, 6, 8)
ERROR: invalid times used per CGM (3), std B
ERROR: invalid times used per Picture (3), std B
                              Metafile Defaults Replacement
                (1, 12, 4)
ERROR: illegal in this state (2), std B
ERROR: required precursor (0, 4) not yet seen
                 (5, 11, 2)
                              Text Precision Stroke
(15.1, 0)
(0, 1) occurred 1 time
(0, 2) occurred 1 time
(0, 3) occurred 1 time
(0, 4) occurred 1 time
(0, 5) occurred 1 time
(1, 1) occurred 1 time
(1, 2) occurred 1 time
(1, 3) occurred 1 time
(1, 4) occurred 1 time
(1, 5) occurred 1 time
(1, 6) occurred 1 time
```

- (1, 7) occurred 1 time
- (1, 8) occurred 1 time
- (1, 9) occurred 1 time
- (1, 10) occurred 1 time
- (1, 11) occurred 1 time
- (1, 12) occurred 3 times
- (1, 12) occurred illegally 2 times
- (1, 15) occurred 1 time
- (2, 1) occurred 1 time
- (2, 2) occurred 1 time
- (2, 3) occurred 1 time
- (2, 4) occurred 1 time
- (2, 5) occurred 1 time
- (2, 6) occurred 2 times
- (2, 6) occurred illegally 1 time
- (2, 7) occurred 1 time
- (3, 1) occurred 1 time
- (4, 1) occurred 146 times
- (4, 7) occurred 4 times
- (5, 11) occurred 1 time
- (5, 11) occurred illegally 1 time
- (5, 22) occurred 1 time
- (5, 23) occurred 1 time
- (5, 34) occurred 1 time

## 12.1.3 Output Harvard Graphics



# 12.1.4 Output IslandDraw



#### 12.2 File D001C010

### 12.2.1 Parser Log MetaCHECK

```
MetaCheck Version 2.05 -- CGM/MIL-D-28003 Conformance Analyzer
Copyright 1988-91 CGM Technology Software
Execution Date: 10/14/92
                          Time: 13:56:00
Metafile Examined : \arbor\c010.cgm
Pictures Examined
                  : All
Elements Examined
                 : All
Bytes Examined
                  : All
Tracing not selected.
======= CGM Conformance Violation Report ==========
Bulletin 20009: Element Class/ID: 4/1 Offset: 6420 octets Element No. 48
Warning; POLYLINE with only one distinct vertex.
Bulletin 20009: Element Class/ID: 4/1 Offset: 13418 octets Element No. 81
Warning; POLYLINE with only one distinct vertex.
Bulletin 20009: Element Class/ID: 4/1 Offset: 16906 octets Element No. 104
Warning; POLYLINE with only one distinct vertex.
====== CALS CGM Profile (MIL-D-28003) Report ==========
No profile discrepancies detected.
======== Conformance Summary Report =============
MetaCheck Version 2.05 -- CGM/MIL-D-28003 Conformance Analyzer
Copyright 1988-91 CGM Technology Software
Execution Date: 10/14/92
                          Time: 13:56:05
Name of CGM under test: \arbor\c010.cgm
Encoding
                   : Binary
Pictures Examined
Elements Examined
                  : All
Bytes Examined : All
```

BEGIN METAFILE string : "ati\_1840\_demo/test2cgm"

METAFILE DESCRIPTION : "Arbor Text draw2cgm version 1.06 \*\*\*

MIL-D-28003/BASIC-1"

Picture 1 starts at octet offset 172; string contains: ""

Conformance Summary : This file conforms to the CGM specification.

This file meets the CALS CGM Profile (MIL-D-28003).

Summary of Testing Performed and Errors Found:

1 Pictures Tested 140 Elements Tested 26372 Octets Tested

0	Illegal CGM Elements	1000	-	1999
	Incorrect CGM Element Lengths	2000	-	2999
0	CGM State Errors	3000	-	3499
0	Required CGM Elements Missing or Wrong	4000	-	4499
0	CGM Parameter Values Out of Range	6000	-	6499
0	CGM Structure Errors	7000	-	7499
0	*** CGM Errors Found (total)	***		
_				
0	Profile State Errors	3500	-	3999
0	Illegal Profile Elements	4500	-	4999
0		6500	-	6999
0	Profile Data Limits Exceeded	8500	-	8999
0	Other Profile Constraints Violated	9500	-	9999
0	*** Profile Violations Found (total)	***		
٠				
3	Warnings (Advisory Remarks)	20000	-	20999

1 distinct errors and warnings were reported.

========= End of Conformance Report ==============

### 12.2.2 validcgm Log

Analysis for file c010.cgm using table table ERROR: invalid times used per CGM (2), std B ERROR: invalid times used per Picture (2), std B

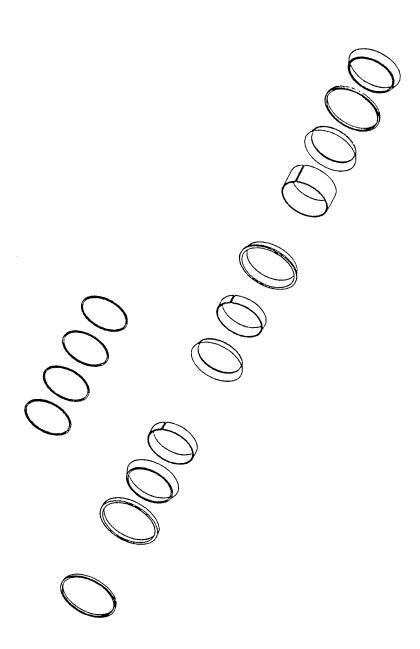
(14, 150) (1, 12, 10) Metafile Defaults Replacement

ERROR: illegal in this state (2), std B

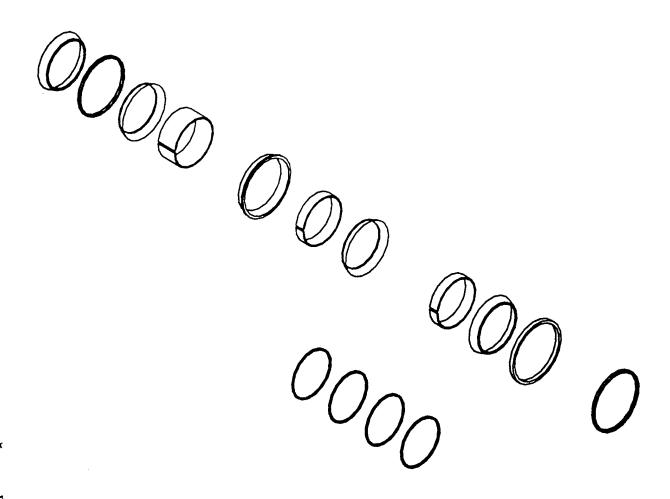
(5, 34) occurred 1 time

```
ERROR: required precursor (0, 3) not yet seen
(14.1, 0) (2, 6, 8) VDC Extent (0, 0) (32767, 32767)
ERROR: invalid times used per CGM (3), std B
ERROR: invalid times used per Picture (3), std B
               (1, 12, 4) Metafile Defaults Replacement
(15, 162)
ERROR: illegal in this state (2), std B
ERROR: required precursor (0, 4) not yet seen
                (5, 11, 2)
                             Text Precision Stroke
(0, 1) occurred 1 time
(0, 2) occurred 1 time
(0, 3) occurred 1 time
(0, 4) occurred 1 time
(0, 5) occurred 1 time
(1, 1) occurred 1 time
(1, 2) occurred 1 time
(1, 3) occurred 1 time
(1, 4) occurred 1 time
(1, 5) occurred 1 time
(1, 6) occurred 1 time
(1, 7) occurred 1 time
(1, 8) occurred 1 time
(1, 9) occurred 1 time
(1, 10) occurred 1 time
(1, 11) occurred 1 time
(1, 12) occurred 3 times
(1, 12) occurred illegally 2 times
(1, 15) occurred 1 time
(2, 1) occurred 1 time
(2, 2) occurred 1 time
(2, 3) occurred 1 time
(2, 4) occurred 1 time
(2, 5) occurred 1 time
(2, 6) occurred 2 times
(2, 6) occurred illegally 1 time
(2, 7) occurred 1 time
(3, 1) occurred 1 time
(4, 1) occurred 112 times
(5, 11) occurred 1 time
(5, 11) occurred illegally 1 time
```

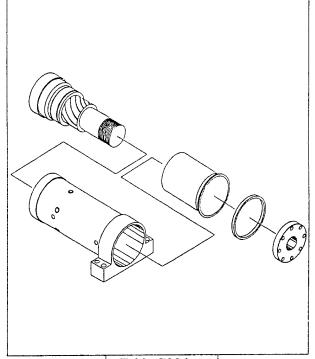
# 12.2.3 Output Harvard Graphics



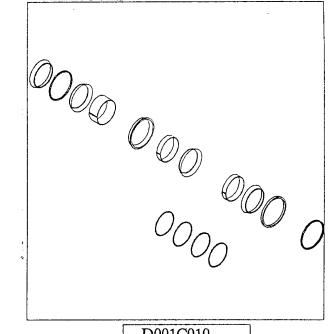
## 12.2.4 Output IslandDraw



## 12.3 Output Ventura Publisher - D001C006 - D001C010



D001C006



D001C010